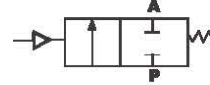


# Angle Seat Valve(Piston Valve) Series PV400 (Flange Ends)

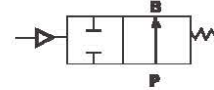
**2/2-way Angle-Seat Valve  
Pneumatically Operated, for  
medium up to +180° C, with Flange ends  
port connection DN 15 - 100**

- High flow rate;
- Long life cycle;
- NC and NO universal actuators with modular universal accessory program up to control heads;
- Deliverable with flow direction below or above seat
- Simple conversion of the circuit function.

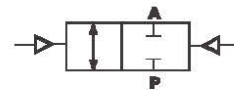
**Symbol Control function A**  
(closed by spring force in rest position)



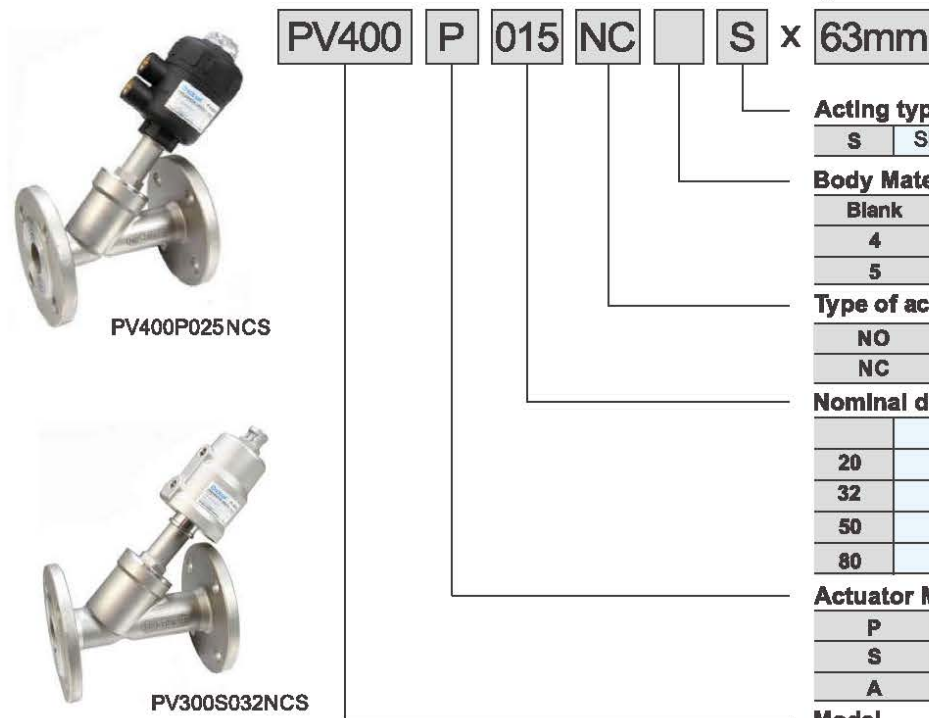
**Control function B**  
(open in rest position)



**Control function I**  
(double-acting actuator)



### ◆ How to Order



<b>Acting type</b>	<b>S</b> Single acting	<b>D</b> Double acting
<b>Body Material</b>	<b>Blank</b> S.S 304 (standard)	
	<b>4</b> S.S 316	
	<b>5</b> S.S 316L	
<b>Type of actuation</b>	<b>NO</b> Normally Open	
	<b>NC</b> Normally Closed (standard)	
<b>Nominal diameter</b>	<b>20</b> G3/4	<b>15</b> G1/2
	<b>32</b> G1 1/4	<b>25</b> G1
	<b>50</b> G2	<b>40</b> G1 1/2
	<b>80</b> G3	<b>65</b> G2 1/2
<b>Actuator Material code</b>	<b>P</b> Plastic Actuator	
	<b>S</b> S.S. Actuator	
	<b>A</b> Aluminium Actuator	
<b>Model</b>	<b>PV400</b>	400 seires Angle Seat Valve

### ◆ Actuator Size

Port Size	Standard Actuator Size mm		
	PA	S.S.	AL
DN10	40,50	40,50	40,50
DN15	40,50	40,50	40,50
DN20	50,63,80	50,63,90	50,63,80
DN25	50,63,80	50,63,90	50,63,80
DN32	63,80	63,90	63,80
DN40	63,80	63,90	63,80
DN50	63,80	63,90	63,80
DN65	80,100	90,125	80,100
DN80	100	125	100
DN100	125	125	125

- ◆ **Flange Specification DIN2576(GB/T82.1)**
- ◆ **PV400 Series Plunger Pilot angle seat valve is propelled by a piston actuator, either single acting or double acting. Actuators are made of three different materials, applicable to different working temperature:**  
**2/2 Way stainless steel valve with big flow capacity**  
**V type seals ensure reliable and effective sealing**  
**Maintenance free, compatible with various accessories, Direction indicating, stroke limiting or manual switching can be achieved conveniently.**

# Angle Seat Valve(Piston Valve) Series PV400 (Flange Ends)

### ◆ Pressure Data Sheet

Control function	Acting type	Flow Direction	Water Hammer	Application
Normally Closed	Single Acting	Upstream	Yes	For compressible medium ( such as gas and steam) and liquid of comparatively low pressure
		Downstream	No	For anti water hammer pipeline, bears certain pressure difference
	Double Acting	Upstream	Yes	Reliable performance, bears pressure difference; valve closes automatically in case of an emergency.
		Downstream	No	For pipeline required of better anti water hammer, bears big pressure difference
Normally Open	Upstream	Yes	For pipeline where valve keeps open. double acting & normally open when silencer comes off.	
	Downstream	No	For pipeline where valve keeps open, anti water hammer, double acting & normally open when silencer comes off	

Water hammer (or, more generally, fluid hammer) is a pressure surge or wave caused when a fluid (usually a liquid but sometimes also a gas) in motion is forced to stop or change direction suddenly (momentum change). A water hammer commonly occurs when a valve closes suddenly at an end of a pipeline system, and a pressure wave propagates in the pipe. It is also called hydraulic shock. This pressure wave can cause major problems, from noise and vibration to pipe collapse. It is possible to reduce the effects of the water hammer pulses with accumulators, expansion tanks, surge tanks, and other features. Designed to close againstflow. Will not chatter or produce water hammer. Operates smoothly and quietly.

Port Size	DN (mm)	Actuator (mm)	Single Acting Normally Closed				Double Acting Normally Closed				Normally Open				Double Acting Assistant Pressure Mpa	Rest Position Pressure Mpa
			Press. Range	Control Press.	Press. Range	Control Press.	Press. Range	Control Press.	Press. Range	Control Press.	Press. Range	Control Press.	Press. Range	Control Press.		
1/2"	DN15	40	0~1.6	0.3~0.45	0~1.1	0.3	0~1.6	0.3~0.45	0~1.6	≥ 0.3	0~1.6	0~1.6	0~1.6	0.2~0.4	≥ 0.4	0~0.2
		50	0~1.6	0.3~0.35	0~1.4	0.45	0~1.6	0.3~0.35	0~1.6	≥ 0.3	0~1.6	0~1.6	0~1.6	0.2~0.4	≥ 0.4	0~0.1
3/4"	DN20	63	0~1.6	0.3~0.4	0~1.4	0.45	0~1.6	0.3~0.4	0~1.6	≥ 0.3	0~1.6	0~1.6	0~1.6	0.3~0.65	0.3~0.4	0~0.2
		80	0~1.6	0.3~0.38	0~1.4	0.45	0~1.6	0.3~0.38	0~1.6	0.3~0.5	0~1.6	0~1.4	0~1.6	0.35~0.7	0.3~0.35	0~0.35
		90 SS	0~1.6	0.2~0.3	0~1.4	0.35	0~1.6	0.2~0.3	0~1.6	0.3~0.4	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.4	0~0.4
1"	DN25	50	0~1.6	0.3~0.45	0~0.75	0.45	0~1.6	0.3~0.45	0~1.3	0.3~0.6	0~1.6	0~0.3	0~1.3	0.3~0.6	0.3~0.4	0~0.35
		63	0~1.6	0.3~0.35	0~1.4	0.5	0~1.6	0.3~0.35	0~1.6	0.3~0.4	0~1.6	0~1.6	0~1.6	0.35~0.6	0.3~0.55	0~0.35
		80	0~1.6	0.2~0.3	0~1.4	0.45	0~1.6	0.2~0.3	0~1.6	0.3~0.4	0~1.6	0~1.6	0~1.6	0.35~0.6	0.35~0.55	0~0.5
1-1/4"	DN32	90 SS	0~1.6	0.2~0.25	0~1.4	0.4	0~1.6	0.2~0.25	0~1.6	0.2~0.3	0~1.6	0~1.6	0~1.6	0.35~0.6	0.35~0.55	0~0.4
		63	0~1.6	0.3~0.5	0~0.06	0.5	0~1.4	0.3~0.5	0~1.4	0.3~0.6	0~1.6	0~1.4	0~1.3	0.35~0.7	0.3~0.5	0~0.4
		80	0~1.6	0.2~0.45	0~1.4	0.6	0~1.6	0.2~0.45	0~1.6	0.3~0.5	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.55	0~0.5
1-1/2"	DN40	90 SS	0~1.6	0.2~0.35	0~1.6	0.65	0~1.6	0.2~0.35	0~1.6	0.2~0.4	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.55	0~0.4
		63	0~1.6	0.3~0.6	0~0.05	0.5	0~1.1	0.3~0.6	0~1.3	0.3~0.7	0~1.6	0~1.4	0~0.65	0.35~0.7	0.3~0.6	0~0.4
		80	0~1.6	0.3~0.55	0~1.4	0.6	0~1.6	0.3~0.55	0~1.6	0.3~0.6	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.7	0~0.5
2"	DN50	90 SS	0~1.6	0.2~0.35	0~1.6	0.65	0~1.6	0.2~0.35	0~1.6	0.2~0.8	0~1.6	0~1.6	0~1.6	0.35~0.7	0.3~0.7	0~0.5
		63	0~1.0	0.3~0.65	0~0.35	0.5	0~0.9	0.3~0.65	0~0.8	0.35~0.8	0~1.0	0~0.6	0~0.5	0.35~0.7	0.35~0.7	0~0.8
		80	0~1.6	0.3~0.55	0~0.9	0.65	0~1.6	0.3~0.55	0~1.6	0.3~0.7	0~1.6	0~1.0	0~0.8	0.35~0.7	0.35~0.7	0~0.5
2-1/2"	DN65	90 SS	0~1.6	0.3~0.5	0~1.1	0.65	0~1.6	0.3~0.5	0~1.6	0.3~0.8	0~1.6	0~1.0	0~1.2	0.35~0.7	0.35~0.7	0~0.4
		63	0~1.6	0.3~0.55	0~0.9	0.65	0~1.6	0.3~0.55	0~1.6	0.3~0.8	0~1.6	0~1.4	0~1.4	0.35~0.7	0.35~0.7	0~0.4
		80	0~1.6	0.2~0.3	0~1.6	0.65	0~1.6	0.2~0.3	0~1.6	0.3~0.4	0~1.6	0~1.4	0~1.4	0.35~0.7	0.35~0.7	0~0.5
3"	DN80	90 SS	0~1.6	0.3~0.65	0~0.5	0.65	0~1.6	0.3~0.65	0~1.1	0.3~0.7	0~1.6	0~0.5	0~0.75	0.3~0.65	0.35~0.7	0~0.5
		63	0~1.6	0.2~0.6	0~0.7	0.65	0~1.6	0.2~0.6	0~1.6	0.3~0.7	0~1.6	0~1.0	0~1.4	0.3~0.6	0.35~0.7	0~0.4
		80	0~1.6	0.3~0.45	0~0.8	0.65	0~1.6	0.3~0.45	0~1.6	0.3~0.55	0~1.6	0~1.0	0~0.8	0.35~0.7	0.35~0.7	0~0.5
4"	DN100	125 SS	0~1.6	0.2~0.7	0~0.9	0.65	0~1.6	0.2~0.7	0~1.6	0.2~0.55	0~1.6	0~1.4	0~1.4	0.3~0.7	0.35~0.7	0~0.5
		63	0~1.6	0.35~0.6	0~0.5	0.65	0~1.6	0.35~0.6	0~1.6	0.3~0.55	0~1.6	0~0.8	0~0.75	0.35~0.7	0.35~0.7	0~0.4
		80	0~1.6	0.2~0.7	0~0.6	0.65	0~1.6	0.2~0.7	0~1.6	0.3~0.65	0~1.6	0~0.7	0~1.2	0.35~0.7	0.35~0.7	0~0.5
4"	DN100	125	0~1.6	0.2~0.7	0~0.6	0.65	0~1.6	0.2~0.7	0~1.6	0.3~0.65	0~1.6	0~0.7	0~1.2	0.35~0.7	0.35~0.7	0~0.5
		63	0~1.6	0.2~0.7	0~0.6	0.65	0~1.6	0.2~0.7	0~1.6	0.3~0.65	0~1.6	0~0.7	0~1.2	0.35~0.7	0.35~0.7	0~0.5
		80	0~1.6	0.2~0.7	0~0.6	0.65	0~1.6	0.2~0.7	0~1.6	0.3~0.65	0~1.6	0~0.7	0~1.2	0.35~0.7	0.35~0.7	0~0.5

Model Specification	Normally Closed	P015NC	P020NC	P025NC	P032NC	P040NC	P050NC	P065NC	P080NC	P100NC
	Normally Open	P015NO	P020NO	P025NO	P032NO	P040NO	P050NO	P065NO	P080NO	P100NO
Material of Body / Actuator	Normally Closed	S015NC	S020NC	S025NC	S032NC	S040NC	S050NC	S065NC	S080NC	S100NC
	Normally Open	S015NO	S020NO	S025NO	S032NO	S040NO	S050NO	S065NO	S080NO	S100NO
Material of Body / Actuator	S.S304 316 /PA									
Seat seal	PTFE/FPM									
Stem seal	PTFE/FPM									
Piston Seal	PTFE/FPM									
Temperature of Medium	PTFE	- 10 ~200°C								
	FPM	- 10 ~100°C								
Installing	Downstream/Upstream									
Operating Method	Plunger Pilot									
Ambient and fluid	Air,Water,Oil,Steam (50CTS Bellow)									
Port size	G1/2	G3/4	G1	G1 1/4	G1 1/2	G2	G2 1/2	G3	G4	
Nominal Diameter mm	13	20	25	32	40	50	65	80	100	
Kv (m³/h)	4.2	8	19	27.5	42	55	90	115	200	
Pressure Range Mpa	0~1.6	0~1.6	0~1.6	0~1.6	0~1.6	0~1.6	0~1.6	0~1.6	0~1.6	0~1.6
Min.Control Pressure Mpa	0.3	0.35	0.35	0.35	0.35	0.35	0.35	0.40	0.40	
Excutor Dimension mm	40/50	50	50/63	63	63	63/80/90	80/90	100/125	125	